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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,097	12/08/2003	Kia Silverbrook	BAL72US	8777

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SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER

WHIPKEY, JASON T

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,097

Applicant(s)

SILVERBROOK ET AL.

Examiner

Jason T. Whipkey

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8 and 10-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,14-18,23-25 and 27 is/are rejected.
- 7) ☒ Claim(s) 6,10-13,19-22,26 and 28-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/113,057.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-5, 14-18, 23-25, and 27 have been considered but are moot in view of the new grounds of rejection.

Applicant also argues on page 9 of the remarks filed January 27, 2005, that "there is a specific disclosure of scanning printheads (inkjet head 5 in Suzuki and print cartridge 22 in Purcell), which in fact teach away from [the] feature" of a pagewidth printhead.

The examiner notes that the references do not "teach away from this feature" simply because they do not disclose a pagewidth printhead. Requiring such a disclosure is not consonant with the public policy underlying 35 U.S.C. 103. The statute, by its very nature, entails modifying disclosed inventions to show unpatentability.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on January 27, 2005, disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of any patent granted on Application Number 10/729,099 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Art Unit: 2612

***Priority***

3. Acknowledgment is made of Applicant's claim for foreign priority based on an application filed in Australia on July 15, 1997. While parent application 09/113,057 includes a certified copy of application PO7986, it is noted that Applicant has not filed a certified copy of the PO7991 application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 is dependent on claim 7, which has been cancelled. For examination purposes, claim 8 will be treated as if it is dependent on claim 5.

6. The amendment to claim 15 has vitiated the rejection under 35 U.S.C. 112, second paragraph. The rejection under this section is therefore withdrawn.

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-5 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (U.S. Patent Application Publication No. 2003/0043273) in view of Purcell (U.S. Patent No. 6,227,643) and Granzow (U.S. Patent No. 5,751,318).

Regarding **claim 1**, Suzuki discloses a handheld camera (see Figure 1), said camera comprising:

a sensor (CCD 40) adapted to sense an image;

a housing (1a in Figure 2) adapted to receive a print roll (24; see paragraph

55);

a print drive system (see the various rollers in Figure 1) for dispensing media (print sheet 11) from the print roll along a print path;

a printer (ink jet head 5 in Figure 2) positioned in the print path for printing images on media dispensed from the print roll;

a processing system (51 in Figure 3; see paragraph 68), the processing system being adapted to:

obtain the image from the sensor (see paragraph 64),

manipulate the image (the error diffusion method described in paragraph 68),

and cause the manipulated image to be printed on the media (see *id.*).

Suzuki is silent with regard to manipulating the image data in accordance with predetermined data representing a manipulation.

Purcell discloses a printer that reads stored data, such as the color of print media in the camera, and modifies the image data in accordance with the color (see column 10, lines 16-17). As stated in column 10, lines 22-27, an advantage of modifying image data before printing is that color errors may be avoided. For this reason, it would have been obvious at the time of invention to have Suzuki's camera manipulate the image data in accordance with predetermined data.

Both Suzuki and Purcell are silent with regard to the printer having a pagewidth printhead.

Granzow discloses a pagewidth printhead 10, as shown in Figure 1. As stated in column 3, lines 57-66, advantages of using a pagewidth printhead include increased reliability, speed,

Art Unit: 2612

and quality. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the printers described by Suzuki and Purcell include a pagewidth printhead.

Regarding **claim 2**, Suzuki is silent with regard to the print roll including a chip having predetermined information stored thereon.

Purcell discloses:

the print roll (see Figure 8) comprising a chip (memory element 140) having predetermined information stored thereon (see column 9, lines 30-40 and 65-67, and column 10, lines 1-27), the processing system being adapted to print the image in accordance with the predetermined information (for example, memory element 140 may store the amount of print media remaining on the roll and use that information to determine whether to permit the commencement of a print job; see column 9, lines 47-51, and column 10, lines 22-27).

As stated in column 9, line 65, through column 10, line 8, an advantage of storing data on a chip included on a print roll is that properties of the print roll may be transferred between printing devices along with the roll. For this reason, it would have been obvious at the time of invention to have a camera read data from a print roll including a chip.

Regarding **claim 3**, the data on the chip described by Purcell is used to modify the image data (see column 10, lines 16-17).

Regarding **claim 4**, as described above, Purcell teaches that the chip stores a remaining media length indicator (i.e., the amount of print media remaining on the roll) and the camera uses

Art Unit: 2612

that information to determine whether to permit the commencement of a print job; see column 9, lines 47-51, and column 10, lines 22-27.

Regarding **claim 5**, Purcell discloses a printer, including:

a guillotine (automatic cutting knife 64; see column 4, line 65), the processing system being adapted to activate the guillotine to cut media from the print roll (as shown in Figure 2, processor 52 controls cutting knife 64 via drive circuits 60).

An advantage of including a guillotine to cut media from the print roll is that a more presentable print may be produced for the user, as the user is not required to cut the media manually. For this reason, it would have been obvious at the time of invention to have the claimed camera include a guillotine.

Regarding **claim 23**, Suzuki discloses a method of operating a handheld camera (see Figure 1), the method comprising:

causing a sensor (CCD 40) to sense an image;  
obtaining the image from the sensor (see paragraph 64);  
manipulating the image (the error diffusion method described in paragraph 68);  
activating a print drive system (see the various rollers in Figure 1) for dispensing media (print sheet 11) from a print roll (24; see paragraph 55) along a print path;  
activating a printer (ink jet head 5 in Figure 2) positioned in the print path to print the manipulated images on the dispensed media (see paragraph 68).



Suzuki is silent with regard to manipulating the image data in accordance with predetermined data representing a manipulation.

Purcell discloses a printer that reads stored data, such as the color of print media in the camera, and modifies the image data in accordance with the color (see column 10, lines 16-17). As stated in column 10, lines 22-27, an advantage of modifying image data before printing is that color errors may be avoided. For this reason, it would have been obvious at the time of invention to have Suzuki's camera manipulate the image data in accordance with predetermined data.

Both Suzuki and Purcell are silent with regard to the printer having a pagewidth printhead.

Granzow discloses a pagewidth printhead 10, as shown in Figure 1. As stated in column 3, lines 57-66, advantages of using a pagewidth printhead include increased reliability, speed, and quality. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the printers described by Suzuki and Purcell include a pagewidth printhead.

Regarding **claim 24**, Suzuki is silent with regard to the print roll including a chip having predetermined information stored thereon.

Purcell discloses:

the print roll (see Figure 8) comprising a chip (memory element 140) having predetermined information stored thereon (see column 9, lines 30-40 and 65-67, and column 10, lines 1-27), the method comprising printing the image in accordance with the predetermined information (for example, memory element 140 may store the amount of print media remaining on the roll and use that

Art Unit: 2612

information to determine whether to permit the commencement of a print job; see column 9, lines 47-51, and column 10, lines 22-27).

Regarding **claim 25**, Purcell discloses a printer, including:

a guillotine (automatic cutting knife 64; see column 4, line 65) the method comprising activating the guillotine to cut media from the print roll (as shown in Figure 2, processor 52 controls cutting knife 64 via drive circuits 60).

An advantage of including a guillotine to cut media from the print roll is that a more presentable print may be produced for the user, as the user is not required to cut the media manually. For this reason, it would have been obvious at the time of invention to have the claimed camera include a guillotine.

10. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sarbadhikari and Granzow.

Regarding **claim 1**, Suzuki discloses a handheld camera (see Figure 1), said camera comprising:

a sensor (CCD 40) adapted to sense an image;

a housing (1a in Figure 2) adapted to receive a print roll (24; see paragraph 55);

a print drive system (see the various rollers in Figure 1) for dispensing media (print sheet 11) from the print roll along a print path;

a printer (ink jet head 5 in Figure 2) positioned in the print path for printing images on media dispensed from the print roll;

a processing system (51 in Figure 3; see paragraph 68), the processing system being adapted to:

obtain the image from the sensor (see paragraph 64), manipulate the image (the error diffusion method described in paragraph 68), and cause the manipulated image to be printed on the media (see *id.*).

Suzuki is silent with regard to manipulating the image data in accordance with predetermined data representing a manipulation.

Sarbadhikari discloses an electronic imaging system, as shown in Figure 2, with memory card 24. The memory card stores “enhancement data files 24b to modify the camera operation, or the images captured by the camera” (column 6, lines 55-58). As stated in column 7, lines 65-67, an advantage of including these instructions on such a card is that new, improved algorithms may be supplied to the camera to enhance image quality. For this reason, it would have been obvious at the time of invention to have Suzuki’s camera use stored data to manipulate the captured image data.

Both Suzuki and Sarbadhikari are silent with regard to the printer having a pagewidth printhead.

Granzow discloses a pagewidth printhead 10, as shown in Figure 1. As stated in column 3, lines 57-66, advantages of using a pagewidth printhead include increased reliability, speed, and quality. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the printers described by Suzuki and Sarbadhikari include a pagewidth printhead.

Regarding **claim 14**, Sarbadhikari discloses:

the camera comprising an input in the form of a card reader (interface 26; see Figure 2), the predetermined data being stored on a card (24, as described above).

As stated in column 8, lines 36-39, an advantage of including image manipulation instructions on a card is that a card reader used for storing images (card readers are commonly used in cameras to store images) may be given an additional function, thus making a separate means for supplying instructions, such as a floppy disk drive, unnecessary. For this reason, it would have been obvious at the time of invention to have Suzuki's camera read the predetermined data from a card via a card reader.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sarbadhikari and Granzow and further in view of Anderson (U.S. Patent No. 6,094,221).

**Claim 15** may be treated like claim 14. However, both Suzuki and Sarbadhikari are silent with regard to the predetermined data being encoded in a scripting language, wherein a script is executed to manipulate the image.

Anderson discloses a digital camera, which has:

predetermined data (instructions generated by a computer; see column 1, lines 65-66) being encoded in a scripting language (see column 2, lines 3-7), the processing system being adapted to execute the script to thereby manipulate the image (scripts are run to configure the camera according to a selected feature, wherein features perform image processing functions; see column 2, lines 5-7 and 64-67).

Art Unit: 2612

An advantage of using a scripting language to manipulate an image is that a user or manufacturer may easily make new image processing features available after the device is released and sold. For this reason, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Suzuki's and Sarbadhikari's cameras modify an image using a script.

12. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sarbadhikari and Granzow and further in view of Lemelson.

**Claim 16** may be treated like claim 14. However, Sarbadhikari is silent with regard to including a card drive system.

Lemelson discloses a device for recording camera data on a magnetic card using the device shown in figures 3 and 4, including:

the card reader (31) comprising a card drive system (motor 42, which activates belt conveyors 40 and 41) for driving the card along a card path, and a card sensor (transducing heads 43' and 44') positioned along the card path.

An advantage of including a card drive system in a camera is that the insertion of a card is easier. For this reason, it would have been obvious at the time of invention to have Sarbadhikari's camera include a card drive system, such as the one described by Lemelson.

Regarding **claim 17**, Lemelson discloses:

data being disposed on a surface of the card (magnetic recording material 13' coats the surface of card 10 for storing data; see column 3, lines 23-26), the

input being adapted to read the predetermined data disposed on the card surface (transducing heads 43' and 44' read the magnetic data).

Regarding **claim 18**, Lemelson discloses:

the card sensor extending across the width of the card path (see transducing heads 43 in Figure 4), the processing system being adapted to activate the card sensor and the drive system to thereby detect the predetermined data as the card moves with respect to the card sensor (see column 5, lines 25-30).

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Purcell and Granzow and further in view of Lemelson.

**Claim 27** may be treated like claim 23. However, Suzuki and Purcell are silent with regard to including a card drive system for driving a card containing the predetermined data.

Lemelson discloses a device for recording camera data on a magnetic card using the device shown in figures 3 and 4, including:

a card reader (31) comprising a card drive system (motor 42, which activates belt conveyors 40 and 41) for driving the card along a card path, and a card sensor (transducing heads 43' and 44') extending across the width of the card path (shown in Figure 4), the method comprising activating the card sensor and the drive system to thereby detect the predetermined data as the card moves with respect to the card sensor (see column 5, lines 25-30).

An advantage of including a card reading system in a camera is that data may be easily exchanged and stored using a compact, reliable medium. For this reason, it would have been

Art Unit: 2612

obvious at the time of invention to have Suzuki's camera include a card reading system, such as the one described by Lemelson.

***Allowable Subject Matter***

14. Claims 6, 10-13, 19-22, 26, and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 6, no prior art could be located that teaches or fairly suggests a handheld camera with a printer using a paper roll, wherein the paper roll contains a chip storing information and a guillotine that is activated in response to a detected attempt to pull the print media from the camera.

Regarding claims 10-13, no prior art could be located that teaches or fairly suggests a camera that prints manipulated image data on an included printer, wherein the image data is manipulated by reading information from a chip on a print roll after the chip and camera perform an authentication.

Regarding claims 19-22, no prior art could be located that teaches or fairly suggests a camera that prints manipulated image data on an included printer, wherein the image data is manipulated by optically reading information from the surface of a card driven by a card drive system.

Regarding claim 26, no prior art could be located that teaches or fairly suggests a camera that prints manipulated image data on an included printer, wherein the image data is manipulated

Art Unit: 2612

by reading information from a chip on a print roll after the chip and camera perform an authentication.

Regarding claims 28-30, no prior art could be located that teaches or fairly suggests a camera that prints manipulated image data on an included printer, wherein the image data is manipulated by reading information in an image from the surface of a card driven by a card drive system.

15. Claim 8 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and intervening claims.

Regarding claim 8, no prior art could be located that teaches or fairly suggests a handheld camera with a printer using a paper roll, wherein the paper roll contains a chip storing information and a guillotine that is activated in response to the print media being dispensed at a faster rate than the print roll drive system.

### *Conclusion*

16. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**



Art Unit: 2612

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Whipkey, whose telephone number is (571) 272-7321. The examiner can normally be reached Monday through Friday from 9:00 A.M. to 5:30 P.M. eastern daylight time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran, can be reached at (571) 272-7382. The fax phone number for the organization where this application is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private

Application/Control Number: 10/729,097

Page 17

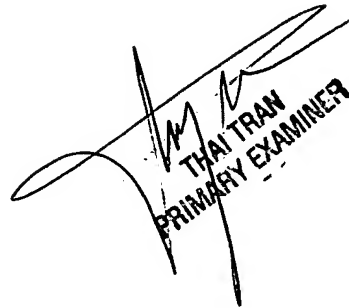
Art Unit: 2612

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTW

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September 12, 2005

  
THAI TRAN  
PRIMARY EXAMINER